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EXAMINER	
D AGOSTA, STEPHEN M	

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/996,511	SMITH, MALCOLM M.	
	Examiner	Art Unit	
	Stephen M. D'Agosta	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-7,9-13,15-19,21-25 and 27-30* is/are rejected.

7)☒ Claim(s) *2, 8, 14, 20 and 26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 November 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

Figures 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1, 7, 19 and 25 objected to because of the following informalities: The term "an other communications device" is too broad and can be interpreted as ANY device (eg. a BSC and/or the described "second mobile" unit for that matter) – this term should be clarified/better defined. Appropriate correction is required. Failure to correct will lead to a USC 112 rejection. For the purposes of examination, it has been interpreted to be a BTS, BSC and/or MSC/gateway.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-5, 7, 9-11, 13, 15-16, 19, 21-22, 25 and 27-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. US 5,940,762 and further in view of Muszynski US 5,850,607 (hereafter Lee and Muszynski).

As per **claim 1**, Lee teaches a communication system (figure 2) comprising:

A BTS engaged in wireless communications with a first mobile and carrying data being transmitted between first and second mobile units (figure 2a shows a mobile phone #28 engaged in a call that inherently requires a second wired/wireless unit, C1, L5-10, and figure 4 shows CDMA network system interfaces as well); and

An other communication device in communication with BTS (figure 2a, BTS connects to BSC's #20, or MSC inherently or PSTN #19), wherein one of the BTS and other device are dynamically selected by a selection procedure to perform a call anchor

function for the data (figure 2a shows three BSC's #20 that would support the mobile if it roams – one being an anchor, C6, L23-33 - and would connect via an MSC if the other mobile were in a different radio network and/or served by a different BSC), the selection procedure comprising determining a communication characteristic comprising at least one of the following:

- a communication characteristic comprising a traffic characteristic of the data. (abstract teaches "a BSC determines if sufficient network resources are available to conduct a connection/handoff" and "type of connection that exists between cell systems, number of calls and frame offset", also see figure 3, also see C12, L9-65).

But is silent on a characteristic of wireless communication between the BTS and at least one of the first and second mobile units.

Muszynski teaches a cellular telecommunications system (figure 1) having mobile exchanges, base stations and user mobile stations roaming in the system, the mobile exchanges are arranged to provide inter-exchange soft handoff with diversity combining. The mobile exchanges further are arranged to provide for control handoff, wherein user communications control handoff, wherein user communications control and signal diversity combining functions involved with the user communications are handed off from a first mobile exchange to a second mobile exchange (Abstract) **and** several methods implementing the above-mentioned CDMA system design objective can be readily identified for the above-referenced exemplary embodiment of a CDMA cellular telecommunications system. For example, the described closed loop MS transmit power control method has the objective to continuously equalize the received qualities of all uplink CDMA signals within a single BS against the background of rapidly changing radio propagation channels undergoing fast and slow fading processes. For this purpose, the BS measures periodically the received Eb/No value, indicative of the signal quality, from each MS CDMA uplink communication and subsequently transmits an appropriate power control command on the downlink communication channel to the MS which in turn sets the CDMA transmitter power accordingly. Ideally, all MS CDMA uplink signals are received at the BS with the same quality and in addition to that, minimum strength necessary in order to maintain the communication link subject to a predetermined quality threshold (C2, L26-44).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Lee, such that it uses a characteristic of wireless communication between the BTS and at least one of the first and second mobile units, to provide means for making the handoff based on important characteristics of the RF signal.

As per **claim 3**, Lee in view of Muszynski teaches claim 1 the selection procedure being performed for a first communication session, thereby generating a first selection result, the selection procedure being further performed for a second communication session, thereby generating a second selection result and the first and second selection results being independent from each other (Abstract – Lee's teaching

of a handoff requires that his selection procedure be performed each time the user's roaming (figure 2a) force a handoff situation which reads on selecting results for first/second sessions that are independent from each other).

As per **claim 4**, Lee in view of Muszynski teaches claim 3 wherein the selection procedure is performed exactly once for at least one of the first and second communication sessions (Abstract – Lee's teaching of a handoff requires that his selection procedure be performed each time the user's roaming (figure 2a) force a handoff situation, eg. at least once, which reads on selection procedure performed once for first/second sessions).

As per **claim 5**, Lee in view of Muszynski teaches claim 3 **but is silent on** the selection procedure is performed at least twice for the at least once of the first and second communication sessions.

The examiner notes that "repetitive procedures" are well known in the art and allow the system to take multiple data points upon which to make judgements. For example, while Lee teaches performing a handover based on if sufficient network resources are available (abstract and figure 3), Lee may want to perform the selection process several times should the first test yield that no resources are present. If the user is moving in the direction of another network, one skilled would continue to test (eg. two or more times) until network resources become available and/or drop the call. Since dropping the call is the harshest result possible, one skilled would test at least one or more times.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Lee in view of Muszynski, such that the selection procedure is performed at least twice for the at least once of the first and second communication sessions, to provide means for checking multiple times if the network has available resources to accommodate a handoff thus ensuring the call is not dropped after just checking once.

As per **claim 7**, Lee teaches a method (figures 2-3) comprising:

Using a BTS to engage in wireless communications with a first mobile (figure 2a shows BTS's #22 and BSC's #20 to support mobile unit #28 communications)

Using BTS to carry data being transmitted between first and second mobile units (figure 2a shows a mobile phone #28 engaged in a call that inherently requires a second wired/wireless unit, C1, L5-10, and figure 4 shows CDMA network system interfaces as well); and

Using an other communication device to communicate with BTS (figure 2a, has BTS connecting to BSC's, #20 or MSC inherently or PSTN #19), AND using the communication characteristic to dynamically select one of the BTS and the other communication device to perform a call anchor function (figure 2a shows three BSC's #20 that would support the mobile if it roams – one being an anchor, C6, L23-33 - and would connect via an MSC if the other mobile were in a different radio network and/or served by a different BSC),

Determining a communication characteristic comprising at least one of the following:

- a communication characteristic comprising a traffic characteristic of the data. (abstract teaches "a BSC determines if sufficient network resources are available to conduct a connection/handoff" and "type of connection that exists between cell systems, number of calls and frame offset", also see figure 3, also see C12, L9-65).

But is silent on a characteristic of wireless communication between the BTS and at least one of the first and second mobile units.

Muszynski teaches a cellular telecommunications system (figure 1) having mobile exchanges, base stations and user mobile stations roaming in the system, the mobile exchanges are arranged to provide inter-exchange soft handoff with diversity combining. The mobile exchanges further are arranged to provide for control handoff, wherein user communications control handoff, wherein user communications control and signal diversity combining functions involved with the user communications are handed off from a first mobile exchange to a second mobile exchange (Abstract) **and** several methods implementing the above-mentioned CDMA system design objective can be readily identified for the above-referenced exemplary embodiment of a CDMA cellular telecommunications system. For example, the described closed loop MS transmit power control method has the objective to continuously equalize the received qualities of all uplink CDMA signals within a single BS against the background of rapidly changing radio propagation channels undergoing fast and slow fading processes. For this purpose, the BS measures periodically the received Eb/No value, indicative of the signal quality, from each MS CDMA uplink communication and subsequently transmits an appropriate power control command on the downlink communication channel to the MS which in turn sets the CDMA transmitter power accordingly. Ideally, all MS CDMA uplink signals are received at the BS with the same quality and in addition to that, minimum strength necessary in order to maintain the communication link subject to a predetermined quality threshold (C2, L26-44).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Lee, such that it uses a characteristic of wireless communication between the BTS and at least one of the first and second mobile units, to provide means for making the handoff based on important characteristics of the RF signal.

As per **claim 9**, Lee in view of Muszynski teaches claim 7 the step of using the communication characteristic is perrformed for a first communication session, thereby generating a first selection result, thereby generating a first selection result, the step of dynamically selecting being further performed for a second communication session, thereby generating a second selection result and the first and second selection results being independent from each other (Abstract – Lee's teaching of a handoff requires that his selection procedure be performed each time the user's roaming (figure 2a) force a handoff situation which reads on selecting results for first/second sessions that are independent from each other).

As per **claim 10**, Lee in view of Muszynski teaches claim 9 wherein the step of using the communication characteristic is performed exactly once for at least one of the first and second communication sessions (Abstract – Lee's teaching of a handoff requires that his selection procedure be performed each time the user's roaming (figure 2a) force a handoff situation, eg. at least once, which reads on selection procedure performed once for first/second sessions).

As per **claim 11**, Lee in view of Muszynski teaches claim 9 **but is silent on** the step of using the communication characteristic is performed at least twice for the at least once of the first and second communication sessions.

The examiner notes that "repetitive procedures" are well known in the art and allow the system to take multiple data points upon which to make judgements. For example, while Lee teaches performing a handover based on if sufficient network resources are available (abstract and figure 3), Lee may want to perform the selection process several times should the first test yield that no resources are present. If the user is moving in the direction of another network, one skilled would continue to test (eg. two or more times) until network resources become available and/or drop the call. Since dropping the call is the harshest result possible, one skilled would test at least one or more times.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Lee in view of Muszynski, such that the selection procedure is performed at least twice for the at least once of the first and second communication sessions, to provide means for checking multiple times if the network has available resources to accommodate a handoff thus ensuring the call is not dropped after just checking once.

As per **claim 13**, Lee teaches a communication system (figures 2-3) comprising:

Means for engaging in wireless communications with a first mobile (figure 2a shows BTS's #22 and BSC's #20 to support mobile unit #28 communications)

Means for carrying data in a communication session being transmitted between first and second mobile units (figure 2a shows a mobile phone #28 engaged in a call that inherently requires a second wired/wireless unit, C1, L5-10, and figure 4 shows CDMA network system interfaces as well); and

Means for communicating with the means for engaging in wireless communications (figure 2a, has BTS connecting to BSC's, #20 or MSC inherently or PSTN #19), AND using the communication characteristic to dynamically select one of the BTS and the other communication device to perform a call anchor function (figure 2a shows three BSC's #20 that would support the mobile if it roams – one being an anchor, C6, L23-33 - and would connect via an MSC if the other mobile were in a different radio network and/or served by a different BSC),

Means for determining a communication characteristic comprising at least one of the following:

- a communication characteristic comprising a traffic characteristic of the data.

(abstract teaches "a BSC determines if sufficient network resources are available to conduct a connection/handoff" and "type of connection that exists between cell systems, number of calls and frame offset", also see figure 3, also see C12, L9-65).

But is silent on a characteristic of wireless communication between the BTS and at least one of the first and second mobile units.

Muszynski teaches a cellular telecommunications system (figure 1) having mobile exchanges, base stations and user mobile stations roaming in the system, the mobile exchanges are arranged to provide inter-exchange soft handoff with diversity combining. The mobile exchanges further are arranged to provide for control handoff, wherein user communications control handoff, wherein user communications control and signal diversity combining functions involved with the user communications are handed off from a first mobile exchange to a second mobile exchange (Abstract) **and** several methods implementing the above-mentioned CDMA system design objective can be readily identified for the above-referenced exemplary embodiment of a CDMA cellular telecommunications system. For example, the described closed loop MS transmit power control method has the objective to continuously equalize the received qualities of all uplink CDMA signals within a single BS against the background of rapidly changing radio propagation channels undergoing fast and slow fading processes. For this purpose, the BS measures periodically the received Eb/No value, indicative of the signal quality, from each MS CDMA uplink communication and subsequently transmits an appropriate power control command on the downlink communication channel to the MS which in turn sets the CDMA transmitter power accordingly. Ideally, all MS CDMA uplink signals are received at the BS with the same quality and in addition to that, minimum strength necessary in order to maintain the communication link subject to a predetermined quality threshold (C2, L26-44).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Lee, such that it uses a characteristic of wireless communication between the BTS and at least one of the first and second mobile units, to provide means for making the handoff based on important characteristics of the RF signal.

As per **claim 15**, Lee in view of Muszynski teaches claim 13 the means for using the communication characteristic to dynamically select comprises:

First means for generating a first anchoring means selection result for a first session; and Second means for generating a second anchoring means selection result for a second session, the first and second selection results being independent from each other (Abstract – Lee's teaching of a handoff requires that his selection procedure be performed each time the user's roaming (figure 2a) force a handoff situation which reads on selecting results for first/second sessions that are independent from each other).

As per **claim 16**, Lee in view of Muszynski teaches claim 15 wherein at least one of the first and second means for generating exactly one anchoring means selection result (Abstract – Lee's teaching of a handoff requires that his selection procedure be performed each time the user's roaming (figure 2a) force a handoff situation, eg. at least once, which reads on selection procedure performed once for first/second sessions).

As per **claim 17**, Lee in view of Muszynski teaches claim 15 **but is silent on** wherein at least one of the first and second means for generating generates at least two anchoring means selection results.

The examiner notes that "repetitive procedures" are well known in the art and allow the system to take multiple data points upon which to make judgements. For example, while Lee teaches performing a handover based on if sufficient network resources are available (abstract and figure 3), Lee may want to perform the selection process several times should the first test yield that no resources are present. If the user is moving in the direction of another network, one skilled would continue to test (eg. two or more times) until network resources become available and/or drop the call. Since dropping the call is the harshest result possible, one skilled would test at least one or more times.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Lee in view of Muszynski, such that the selection procedure is performed at least twice for the at least once of the first and second communication sessions, to provide means for checking multiple times if the network has available resources to accommodate a handoff thus ensuring the call is not dropped after just checking once.

As per **claim 19**, Lee teaches a computer readable medium (figure 2 teaches the system and figure 3 teaches the computer logic/program required on network component processors) to perform the steps of:

Using a BTS to engage in wireless communications with a first mobile (figure 2a shows BTS's #22 and BSC's #20 to support mobile unit #28 communications)

Using BTS to carry data being transmitted between first and second mobile units (figure 2a shows a mobile phone #28 engaged in a call that inherently requires a second wired/wireless unit, C1, L5-10, and figure 4 shows CDMA network system interfaces as well); and

Using an other communication device to communicate with BTS (figure 2a, has BTS connecting to BSC's, #20 or MSC inherently or PSTN #19), AND using the communication characteristic to dynamically select one of the BTS and the other communication device to perform a call anchor function (figure 2a shows three BSC's #20 that would support the mobile if it roams – one being an anchor, C6, L23-33 - and would connect via an MSC if the other mobile were in a different radio network and/or served by a different BSC),

Determining a communication characteristic comprising at least one of the following:

- a communication characteristic comprising a traffic characteristic of the data.

(abstract teaches "a BSC determines if sufficient network resources are available to conduct a connection/handoff" and "type of connection that exists between cell systems, number of calls and frame offset", also see figure 3, also see C12, L9-65).

But is silent on a characteristic of wireless communication between the BTS and at least one of the first and second mobile units.

Muszynski teaches a cellular telecommunications system (figure 1) having mobile exchanges, base stations and user mobile stations roaming in the system, the mobile exchanges are arranged to provide inter-exchange soft handoff with diversity combining. The mobile exchanges further are arranged to provide for control handoff, wherein user communications control handoff, wherein user communications control and signal diversity combining functions involved with the user communications are handed off from a first mobile exchange to a second mobile exchange (Abstract) **and** several methods implementing the above-mentioned CDMA system design objective can be readily identified for the above-referenced exemplary embodiment of a CDMA cellular telecommunications system. For example, the described closed loop MS transmit power control method has the objective to continuously equalize the received qualities of all uplink CDMA signals within a single BS against the background of rapidly changing radio propagation channels undergoing fast and slow fading processes. For this purpose, the BS measures periodically the received Eb/No value, indicative of the signal quality, from each MS CDMA uplink communication and subsequently transmits an appropriate power control command on the downlink communication channel to the MS which in turn sets the CDMA transmitter power accordingly. Ideally, all MS CDMA uplink signals are received at the BS with the same quality and in addition to that, minimum strength necessary in order to maintain the communication link subject to a predetermined quality threshold (C2, L26-44).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Lee, such that it uses a characteristic of wireless communication between the BTS and at least one of the first and second mobile units, to provide means for making the handoff based on important characteristics of the RF signal.

As per **claim 21**, Lee in view of Muszynski teaches claim 19 the step of using the communication characteristic is perrformed for a first communication session, thereby generating a first selection result, thereby generating a first selection result, the step of dynamically selecting being further performed for a second communication session, thereby generating a second selection result and the first and second selection results being independent from each other (Abstract – Lee's teaching of a handoff requires that his selection procedure be performed each time the user's roaming (figure 2a) force a handoff situation which reads on selecting results for first/second sessions that are independent from each other).

As per **claim 22**, Lee in view of Muszynski teaches claim 21 wherein the step of using the communication characteristic is performed exactly once for at least one of the first and second communication sessions (Abstract – Lee's teaching of a handoff requires that his selection procedure be performed each time the user's roaming (figure 2a) force a handoff situation, eg. at least once, which reads on selection procedure performed once for first/second sessions).

As per **claim 23**, Lee in view of Muszynski teaches claim 21 **but is silent on** the step of using the communication characteristic is performed at least twice for the at least once of the first and second communication sessions.

The examiner notes that "repetitive procedures" are well known in the art and allow the system to take multiple data points upon which to make judgements. For example, while Lee teaches performing a handover based on if sufficient network resources are available (abstract and figure 3), Lee may want to perform the selection process several times should the first test yield that no resources are present. If the user is moving in the direction of another network, one skilled would continue to test (eg. two or more times) until network resources become available and/or drop the call. Since dropping the call is the harshest result possible, one skilled would test at least one or more times.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Lee in view of Muszynski, such that the selection procedure is performed at least twice for the at least once of the first and second communication sessions, to provide means for checking multiple times if the network has available resources to accommodate a handoff thus ensuring the call is not dropped after just checking once.

As per **claim 25**, Lee teaches a communication system (figure 2) comprising:

A first network (figure 2a shows one network connected by BSC's);

A gateway connecting first network to second network (figure 2a shows connecting to second network, eg. PSTN, #19 which inherently requires gateway hardware as shown in figure 4, two #46's and/or #48. The examiner notes MSC's perform similar functionality and are inherent to Lee's cellular system);

Using a BTS to engage in wireless communications with a first mobile (figure 2a shows BTS's #22 and BSC's #20 to support mobile unit #28 communications) and carrying data being transmitted between first and second mobile units and in communication with first network (figure 2a shows a mobile phone #28 engaged in a call that inherently requires a second wired/wireless unit, C1, L5-10, and figure 4 shows CDMA network system interfaces as well); and

Using an other communication device to communicate with first network (figure 2a, has BTS connecting to BSC's, #20 or MSC inherently or PSTN #19), AND wherein the BTS and other device are dynamically selected to perform a call anchor function for the data by a selection process (figure 2a shows three BSC's #20 that would support the mobile if it roams – one being an anchor, C6, L23-33 - and would connect via an

MSC if the other mobile were in a different radio network and/or served by a different BSC),

Determining a communication characteristic comprising at least one of the following:

- a communication characteristic comprising a traffic characteristic of the data. (abstract teaches "a BSC determines if sufficient network resources are available to conduct a connection/handoff" and "type of connection that exists between cell systems, number of calls and frame offset", also see figure 3, also see C12, L9-65).

But is silent on a characteristic of wireless communication between the BTS and at least one of the first and second mobile units.

Muszynski teaches a cellular telecommunications system (figure 1) having mobile exchanges, base stations and user mobile stations roaming in the system, the mobile exchanges are arranged to provide inter-exchange soft handoff with diversity combining. The mobile exchanges further are arranged to provide for control handoff, wherein user communications control handoff, wherein user communications control and signal diversity combining functions involved with the user communications are handed off from a first mobile exchange to a second mobile exchange (Abstract) **and** several methods implementing the above-mentioned CDMA system design objective can be readily identified for the above-referenced exemplary embodiment of a CDMA cellular telecommunications system. For example, the described closed loop MS transmit power control method has the objective to continuously equalize the received qualities of all uplink CDMA signals within a single BS against the background of rapidly changing radio propagation channels undergoing fast and slow fading processes. For this purpose, the BS measures periodically the received Eb/No value, indicative of the signal quality, from each MS CDMA uplink communication and subsequently transmits an appropriate power control command on the downlink communication channel to the MS which in turn sets the CDMA transmitter power accordingly. Ideally, all MS CDMA uplink signals are received at the BS with the same quality and in addition to that, minimum strength necessary in order to maintain the communication link subject to a predetermined quality threshold (C2, L26-44).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Lee, such that it uses a characteristic of wireless communication between the BTS and at least one of the first and second mobile units, to provide means for making the handoff based on important characteristics of the RF signal.

As per **claim 27**, Lee in view of Muszynski teaches claim 25 the selection procedure being performed for a first communication session, thereby generating a first selection result, the selection procedure being further performed for a second communication session, thereby generating a second selection result and the first and second selection results being independent from each other (Abstract – Lee's teaching of a handoff requires that his selection procedure be performed each time the user's roaming (figure 2a) force a handoff situation which reads on selecting results for first/second sessions that are independent from each other).

As per **claim 28**, Lee in view of Muszynski teaches claim 27 wherein the selection procedure is performed exactly once for at least one of the first and second communication sessions (Abstract – Lee's teaching of a handoff requires that his selection procedure be performed each time the user's roaming (figure 2a) force a handoff situation, eg. at least once, which reads on selection procedure performed once for first/second sessions).

As per **claim 29**, Lee in view of Muszynski teaches claim 27 **but is silent on** the selection procedure is performed at least twice for the at least once of the first and second communication sessions.

The examiner notes that "repetitive procedures" are well known in the art and allow the system to take multiple data points upon which to make judgements. For example, while Lee teaches performing a handover based on if sufficient network resources are available (abstract and figure 3), Lee may want to perform the selection process several times should the first test yield that no resources are present. If the user is moving in the direction of another network, one skilled would continue to test (eg. two or more times) until network resources become available and/or drop the call. Since dropping the call is the harshest result possible, one skilled would test at least one or more times.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Lee in view of Muszynski, such that the selection procedure is performed at least twice for the at least once of the first and second communication sessions, to provide means for checking multiple times if the network has available resources to accommodate a handoff thus ensuring the call is not dropped after just checking once.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6, 12, 18, 24 and 30 rejected under 35 U.S.C. 102(b) as being anticipated by Lee.

As per **claim 6**, Lee teaches a communication system (figure 2) comprising:

A BTS engaged in wireless communications with a first mobile (figure 2a shows a mobile phone #28 engaged in a call, C1, L5-10, and figure 4 shows CDMA network system interfaces as well) and performing the steps of:

Carrying data being transmitted between the first mobile unit and a second mobile unit (figure 2a shows three BSC's #20 that would support the mobile if it roams

and would connect via an MSC if the other mobile were in a different radio network and/or served by a different BSC. A second mobile is inherent for mobile to wired/wireless communications); and

Performing a call anchor function for the data (one BTS being an anchor, C6, L23-33).

As per **claim 12**, Lee teaches a method (figures 2-3) comprising:

Using a BTS to engage in wireless communications with a first mobile (figure 2a shows a mobile phone #28 engaged in a call, C1, L5-10, and figure 4 shows CDMA network system interfaces as well) and performing the steps of:

Using the BTS to carry data being transmitted between the first mobile unit and a second mobile unit (figure 2a shows three BSC's #20 that would support the mobile if it roams and would connect via an MSC if the other mobile were in a different radio network and/or served by a different BSC. A second mobile is inherent for mobile to wired/wireless communications); and

Using the BTS to perform a call anchor function for the data (one BTS being an anchor, C6, L23-33).

As per **claim 18**, Lee teaches a communications system (figures 2-3) comprising:

Means for engaging in wireless communication with a first mobile unit (figure 2a shows a mobile phone #28 engaged in a call, C1, L5-10, and figure 4 shows CDMA network system interfaces as well) comprising:

Means for carrying data in a session between the first mobile unit and a second mobile unit (figure 2a shows three BSC's #20 that would support the mobile if it roams and would connect via an MSC if the other mobile were in a different radio network and/or served by a different BSC. A second mobile is inherent for mobile to wired/wireless communications); and

Means for anchoring the communication session (one BTS being an anchor, C6, L23-33).

As per **claim 24**, Lee teaches a computer-readable medium having a set of instructions operable to direct a processor (figure 2 teaches the system and figure 3 teaches the computer logic/program required on network component processors) to perform the steps of:

Using a BTS to engage in wireless communications with a first mobile (figure 2a shows a mobile phone #28 engaged in a call, C1, L5-10, and figure 4 shows CDMA network system interfaces as well) and performing the steps of:

Using the BTS to carry data being transmitted between the first mobile unit and a second mobile unit (figure 2a shows three BSC's #20 that would support the mobile if it roams and would connect via an MSC if the other mobile were in a different radio network and/or served by a different BSC. A second mobile is inherent for mobile to wired/wireless communications); and

Using the BTS to perform a call anchor function for the data (one BTS being an anchor, C6, L23-33).

As per **claim 30**, Lee teaches a communication system (figure 2) comprising:
A first network (figure 2a shows one network connected by BSC's);
A gateway connecting first network to second network (figure 2a shows connecting to second network, eg. PSTN, #19 which inherently requires gateway hardware as shown in figure 4, two #46's and/or #48. The examiner notes MSC's perform similar functionality and are inherent to Lee's cellular system);
A first mobile (figure 2a, #28)
A BTS connected to first mobile and engaged in wireless communication with first mobile (figure 2a shows BTS's #22 and BSC's #20 to support mobile unit #28 communications), the BTS performing the steps of:
Carrying data being transmitted between first and second mobile units (figure 2a shows a mobile phone #28 engaged in a call that inherently requires a second wired/wireless unit, C1, L5-10, and figure 4 shows CDMA network system interfaces as well); and
Performing a call anchor function for the data (figure 2a, has BTS connecting to BSC's, #20 or MSC inherently or PSTN #19), AND (figure 2a shows three BSC's #20 that would support the mobile if it roams – one being an anchor, C6, L23-33 - and would connect via an MSC if the other mobile were in a different radio network and/or served by a different BSC).

Allowable Subject Matter

Claims 2, 8, 14, 20 and 26 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

These claims recite highly specific designs not found in the prior art cited.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

1. Roder et al. US 6,09,326.
2. Valentine et al. US 6,353,607.
3. Neumiller et al. US 6,341,222.

4. Lodwig et al. US 5,590,172.

5. Jiang et al. US 6,519,457.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Stephen D'Agosta